

### Abstract of the Disclosure

5 A magnetic recording medium is formed with a distribution of low coercivity regions functioning as a transition pattern for servo information capable of being sensed by a read/write head by exposing a masked magnetic layer to ions to change the coercivity of the exposed magnetic layer without substantially affecting the topography of the magnetic layer.

10 Embodiments of the present invention include forming a series of substantially radially extending low coercivity regions used to divide the magnetic layer into a plurality of sectors comprising substantially concentric circumferentially extending data tracks by exposing a masked magnetic layer having a high coercivity, i.e. from about 2000 Oe to about 10000 Oe, to one or more heavy atom ion bombardments of gaseous ions, e.g. argon ions, at a dose of about  $1 \times 10^{13}$  atoms/cm<sup>2</sup> to about  $9 \times 10^{15}$  atoms/cm<sup>2</sup> having an implantation energy of about 10 KeV to about 50 KeV.

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